

ABSTRACT OF THE DISCLOSURE

A package to be mounted with semiconductor chips has a heat-radiating substrate having a thickness of smaller than 0.4 mm of a Cu-Mo composite as prepared by impregnating from 30 to 40 % by mass of copper (Cu) melt into a green compact of molybdenum. The heat-radiating substrate is produced by preparing an Mo green compact through isostatic molding, mounting Cu on the Mo green compact, heating it to thereby impregnate copper into the Mo green compact to give a Cu-Mo composite, and rolling the Cu-Mo composite into a sheet substrate. In the isostatic molding process, at least two or more plates 27, 29, 31, 33, 35 and 37 are disposed adjacent to the inner surface of a side wall as divided into at least two portions, Mo powder is filled into the space as formed by those plates 27, 29, 31, 33, 35 and 37 with covering the Mo powder compact with a flexible cover, such as a rubber medium 39 or the like, to prepare a composite, then the resulting composite is put into a pressure tank, an external isostatic pressure is applied thereto against the flexible cover, and the plates are slid via the cover along the side wall thereby compressing the composite between the thus-slid plates into an Mo green compact.